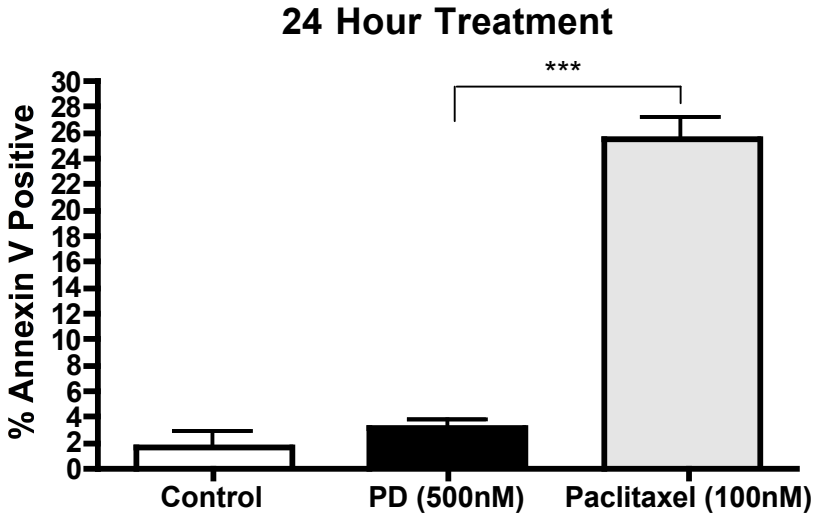
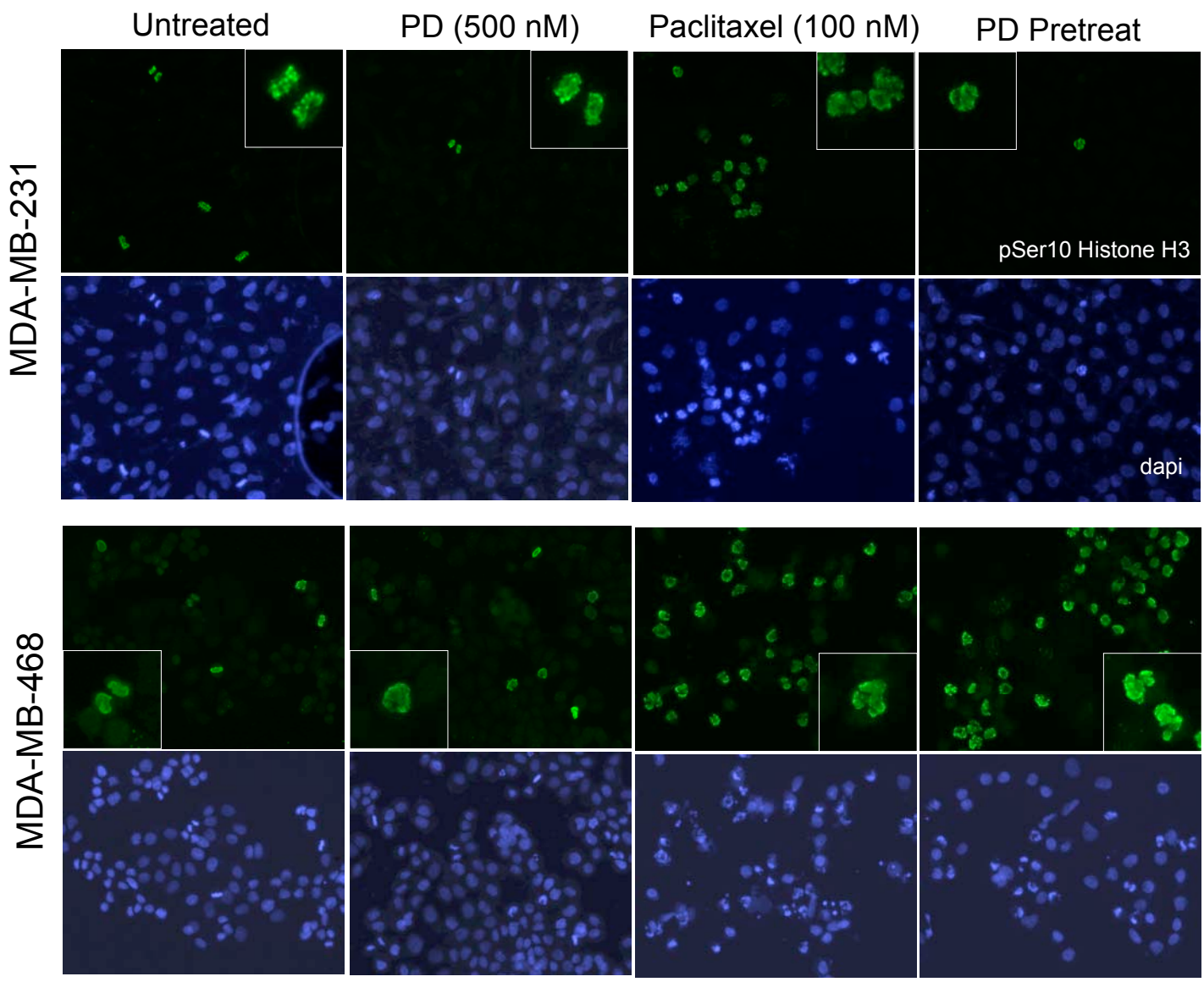
Supplemental Figure 1

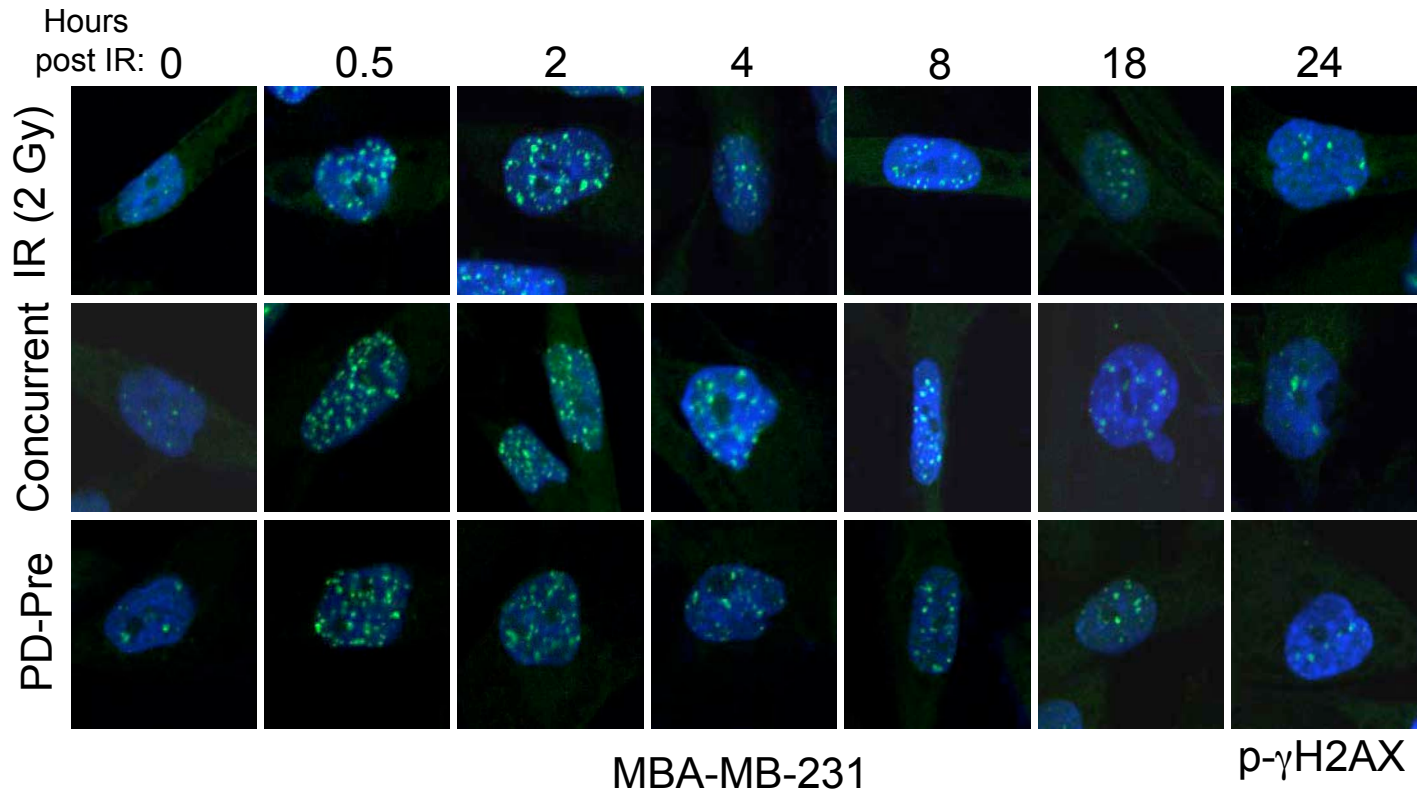


MDA-MB-231

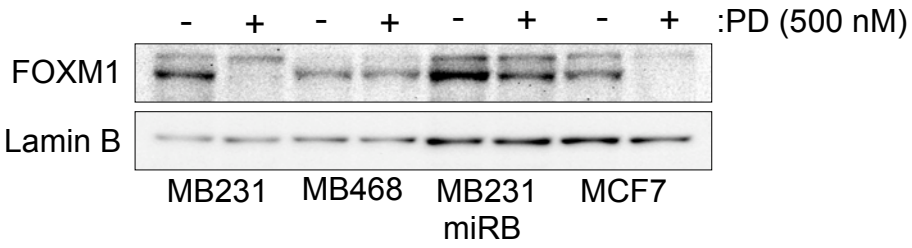
Supplemental Figure 2



Supplemental Figure 3



Supplemental Figure 4



Supplemental Figure Legends

Figure S1. ***PD0332991 does not increase rates of cell death.*** Quantification of Annexin V positive populations in response to 24 hour PD0332991 exposure as compared to vehicle control. Paclitaxel was used as a positive control.

Figure S2. ***CDK4/6 inhibition prevents mitotic catastrophe in response to Paclitaxel.*** MDA-MB-231 cells were treated as described in Figure 2 and immunoflourescence staining was performed for phospho-Histone H3 (ser10) to visualize mitotic fidelity. Dapi was used as a counterstain.

Figure S3. ***CDK4/6 inhibition does not alter the rate of DNA damage induction or repair in response to IR.*** Representative phospho-γ-H2AX images of MDA-MB-231 cells treated and quantified as described in Figure 4A.

Figure S4. ***FOXM1 protein levels are regulated in an RB-dependent manner.*** Immunoblot analysis for FOXM1 in matched RB-proficient (MB231) and RB-deficient (MB231-miRB) as well as wild type RB-negative (MB468) and RB-proficient (MCF7) cell populations treated with 500 nM PD0332991 or vehicle control. Lamin B was used as a loading control.